
What has been your Medication Management experience?

Any Prescribers?

Any Pharmacists?

Any Vendors with Medication Management services?

The Inappropriate Use of Meds Causes Harm

- > 1.5M people harmed; +/- \$3.5B in unnecessary medical cost per year¹
 - 180,000 fatal or near fatal Adverse Drug Events (ADEs) per year²
- Who is most at risk?
 - **Elderly**
(1 in 5 receive wrong med)³
 - **Multiple Medications**
(each additional med increases likelihood 10%)⁴
 - **Across Care Settings**
(outpatient^{5, 6}; hospital⁷; long-term care⁸)
- 60% of ADEs are preventable⁹

NB: Citations can be found at the end of presentation

It Happens NOT for Nefarious Reasons

- Limited data at the point of care
 - Only 50% chance of receiving recommended care in U.S.¹⁰
- Preferences
- Persuasive marketing of medications
- Perverse, fill and bill and other financial incentives still exist
- Limited longitudinal monitoring

“We want to make sure that when doctors decide which medication to prescribe, they select the most cost-effective drug – not necessarily the one with the largest advertising budget,” State Medicaid Agency Director

What is Medication Management?

- Medication Therapy Review
 - Population-based
 - Comprehensive (i.e., whole-person) or Targeted (therapeutic category, condition-specific, etc.)
 - Employing evidence-based guidelines
- Patient Centered
 - Personal medication record
 - Medication action plan
- Intervention and Referral
 - Prescriber and/or Case Manager and/or Patient / Caregiver
- Documentation and follow-up

Derived from Journal of American Pharmacists Association, 45:5, SEP/OCT 2005, page 573-579

Objective: Identify & Prevent Medication Related Problems

Types of Medication Related Problems Detected

- Drug Use Without Indication
- Untreated Indication
- Potentially Improper Drug Selection
- Dose May Be Too High / Low
- Actual or Potential Adverse Drug Reaction
- Actual or Potential Drug Interaction
- Failure to Receive Medication
- Duplicate Therapy

Source: Hepler CD, Strand LM. Opportunities and responsibilities in pharmaceutical care. Am J Hosp Pharm Mar 1990;47(3):533-543.

What it is not!

Previous Efforts Have Not Resolved Cost or Quality Problems

- Preferred Drug Lists / Formularies
- Caps on Drug Spending
- Market-based Rebates
- Retrospective Medication Review*

* source: Hennessy S, Bilker WB, Zhou L, et al. Retrospective drug utilization review, prescribing errors, and clinical outcomes. *JAMA Sep 2003;290(11):1494-1499.*

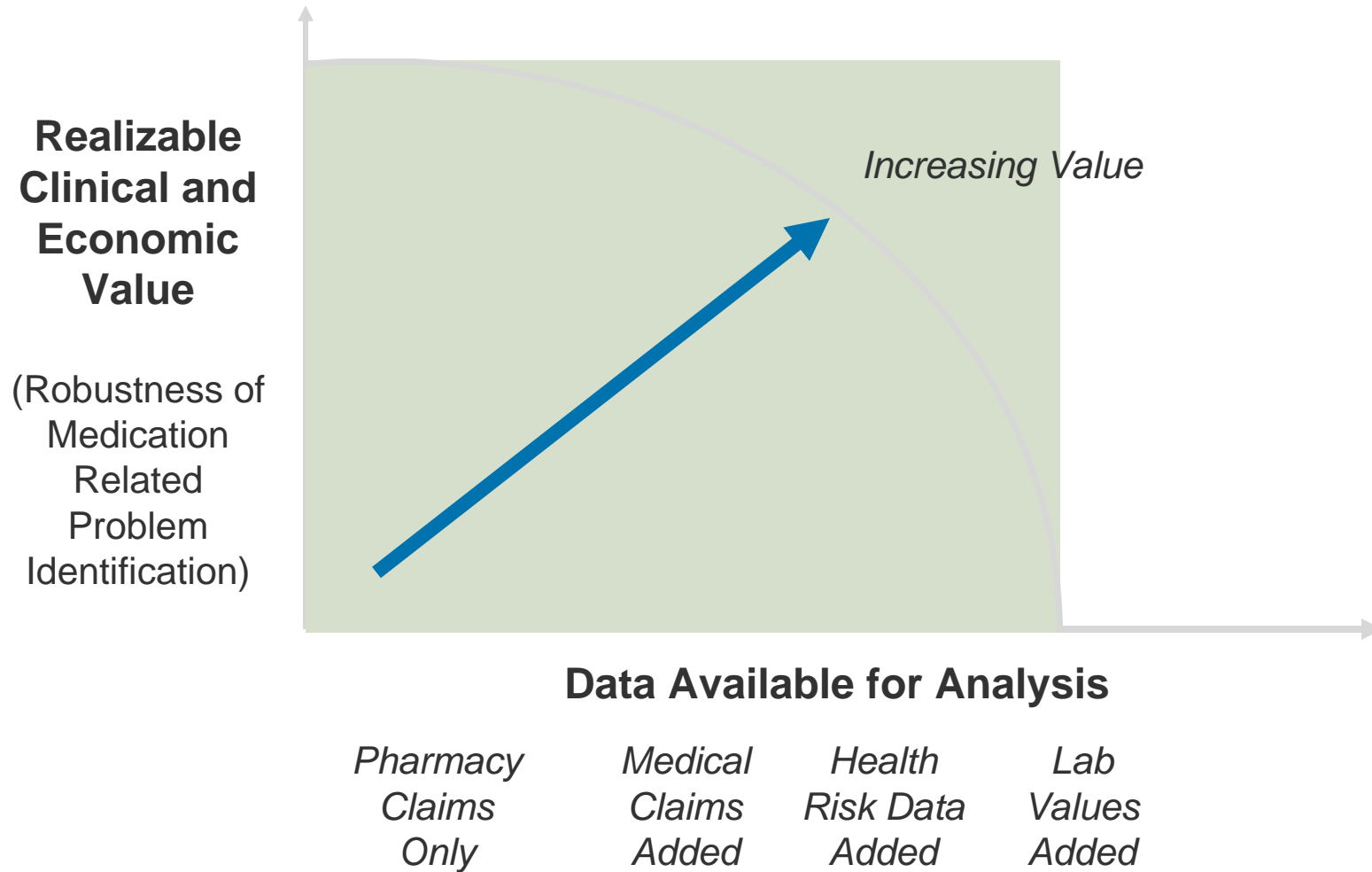
Best Practices

- Engage physicians
 - Good data - GIGO
 - Provide on-going monitoring
 - Demonstrate value
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Best Practices: Engage Physicians

- **Physician input** into the development of programs
 - **Timely input** so the next patient encounter can be more effective
 - **Relevant data** and recommendations that pertain to particular patients or clinical practice
 - **Accurate data** so that appropriate care decisions can be made
 - **Accessible data** so that getting to the data is not a problem
 - **Ease of use** so that the physician can act on the data quickly
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Best Practices: Data Availability Drives Value



Best Practices: Continue to re-assess

- Conduct an initial medication risk stratification
 - Conduct new medication assessment when “Trigger Events” occur:
 - Change in the medication profile (e.g., add or delete med, change dose)
 - Change in health status (e.g., new diagnosis, hospitalization)
 - Change in the allergy profile
 - Change in lab data values
 - Close the loop: Provide monitoring and feedback to all key stakeholders in the patient’s care
 - Provide academic detailing that is constructive so that physicians are motivated to change
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Best Practices: Identify Sources of Value

Patient



- Improve overall health and enhance quality of life
 - Increase self-management skills
 - Reduce adverse drug events
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Payor



- Ensure right drug, right dose, right frequency
 - Avoid costly care
 - Decrease use of emergency services
 - Reduce hospitalizations
 - Defer admission to long-term care facilities
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Prescriber



- Ensure adherence to best practices
 - Provide patient-specific data that is timely, accurate and relevant to their clinical practice
 - Increase professional competence of our clinician partners
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Case Study: Quality Metrics in Hospice

Representative Hospice Quality Metrics

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|--|---|--|
| ■ Impact on Medication-related Outcomes | ➔ | ■ 72 hours post admission pain control exceeding 96%, compared to industry benchmark of 75-80% |
| ■ Impact on Patient Care | ➔ | ■ Approximately 3/4 of nurses surveyed agreed that partnership enables them to provide better patient care |
| ■ Impact on Hospice Financials | ➔ | ■ 100% of CFO respondents realized direct pharmacy cost reduction; 100% also realized indirect pharmacy cost reduction |
| ■ Improvement in Quality and Standardization | ➔ | ■ 90% indicated improvement in quality and standardization |
| ■ Improvement in Patient Symptom Management | ➔ | ■ 85% indicated improvement in patient symptom management |

Source: Survey of Hospice Administrators (administered to hospices with at least one quarter of operating experience with excelleRx).

Opportunity Exists in DM

Typically Medication Management is Under-represented

- Review and assessment based upon incomplete data
 - Difficult to detect medication related problems
 - Undeveloped Medication Management Tools
 - Difficult to assess complex medication regimens
 - Suboptimal Skill Set
 - Nurse centric with limited pharmacist involvement
 - Limited Interventions
 - Patient centric without physician engagement
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Medication Management How It Can Be Delivered

Medical Management

- Provide medication management services to complement existing medical management programs such as DM, CM, UM, etc.

Pharmacy Benefit

- Provide medication management services to complement traditional PBM services such as industry-standard drug utilization review

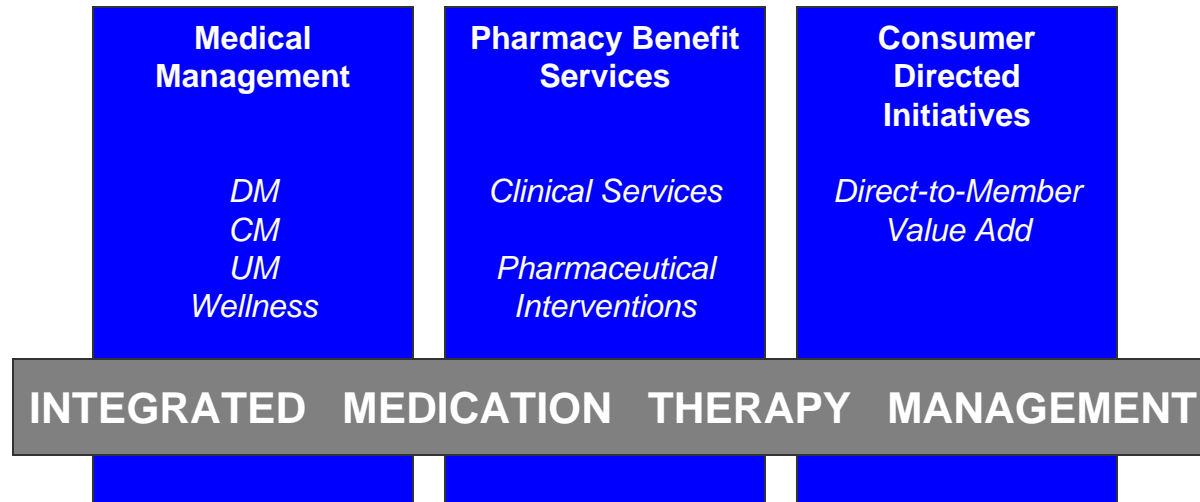
Direct to Member

- Provide medication management services direct-to-members as a value added offering

Pharmaceutical Interventions

- Identify targeted opportunities for therapeutic interchange or additions within specific member populations
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End Goal: Provide an integrated platform



Supported by:

- Access to clinical pharmacist resources
 - Evidence-base guidelines
 - Clinical Decision Support Tools (medication risk stratification)
 - Longitudinal, web-based medication management platform
 - Outcome measurement and financial analysis
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Citations

1. *Preventing Medication Errors, IOM, July 20, 2006*
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 4. *Gandi, R.K., Weingart S.N., Borus, J., et al. (April 17, 2003). Adverse drug events in ambulatory care. N Engl J Med 348(16): 1560.*
 5. *D. Budnitz, et al, National Surveillance of Emergency Department Visits for Outpatient Adverse Drug Events. JAMA. 2006;296:1858-1866. M Goulding, PhD, CDC. Arch Intern Med/ 164:305. Feb 9, 2004.*
 6. *M Goulding, PhD, CDC. Arch Intern Med/ 164:305. Feb 9, 2004.*
 7. *Donald M Berwick MD N Engl J Med 248:25;2570. June 19, 2003.*
 8. *Lau, Dennis et al; Hospitalizations and Death Associated with Potentially Inappropriate Medication Prescriptions Among Elderly Nursing Home Residents. Arch Intern Med . 165:1. Jan 10, 2005*
 9. *Tejal Gandhi MD, MPH. N Engl J Med 348:16;1556. April 17, 2003.*
 10. *Kerr, E.A., McGlynn, E.A., Adams, J. et al. (2003, Sept/Oct). Profiling the quality of care in twelve communities: Results from the CQI study. Health Affairs 23(5):247-256.*
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